

Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 19.09.2011

Version: 4.0

Product: **Amasil® NA**

(ID no. 30286605/SDS_GEN_EU/EN)

Date of print 20.09.2011

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Amasil® NA

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: feed additive(s)

Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-Masterdata@basf.com

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Label elements

According to Regulation (EC) No 1272/2008 [CLP]

| Globally Harmonized System, EU (GHS)

Pictogram:



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Signal Word:

| Danger

Hazard Statement:

| H318 Causes serious eye damage.
| H315 Causes skin irritation.

Precautionary Statements (Prevention):

| P280d Wear eye/face protection.
| P280c Wear protective gloves.
| P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

| P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove
contact lenses, if present and easy to do. Continue rinsing.
| P310 Immediately call a POISON CENTER or doctor/physician.
| P303 + P352 IF ON SKIN (on hair): Wash with plenty of soap and water.
| P332 + P313 If skin irritation occurs: Get medical advice/attention.
| P362 Take off contaminated clothing and wash before reuse.According to Directive 67/548/EEC or 1999/45/EC

as in Annex VI of Directive 67/548/EEC

Hazard symbol(s)

Xi Irritant.



R-phrases(s)

R41 Risk of serious damage to eyes.
R38 Irritating to skin.

S-phrases(s)

S39 Wear eye/face protection.
S26 In case of contact with eyes, rinse immediately with plenty of water and
seek medical advice.

Classification and labelling were undertaken on the basis of tests on the preparation.

Classification of the substance or mixtureAccording to Regulation (EC) No 1272/2008 [CLP]| Skin Corr./Irrit. 2
| Eye Dam./Irrit. 1According to Directive 67/548/EEC or 1999/45/EC

Possible Hazards:

Irritating to skin.
Risk of serious damage to eyes.

For the classifications not written out in full in this section the full text can be found in section 16.

Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

Other Hazards (GHS):

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Preparation based on: formic acid, sodium formate

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

| formic acid...%

Content (W/W): >= 50 % - < 75 %	Flam. Liq. 3
CAS Number: 64-18-6	Skin Corr./Irrit. 1A
EC-Number: 200-579-1	H314, H226
REACH registration number: 01-2119491174-37	
INDEX-Number: 607-001-00-0	

Hazardous ingredients

according to Directive 1999/45/EC

| formic acid...%

Content (W/W): >= 50 % - < 75 %
CAS Number: 64-18-6
EC-Number: 200-579-1
REACH registration number: 01-2119491174-37
INDEX-Number: 607-001-00-0
Hazard symbol(s): C
R-phrases: 35, 10

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

4. First-Aid Measures

Description of first aid measures

Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water. Consult a doctor if skin irritation persists.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Rinse mouth immediately and then drink plenty of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Hazards: No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Evolution of fumes/fog.

Advice for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Breathing protection required. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For large amounts: Dike spillage. Pump off product.

For residues: Pick up with suitable absorbent material (e.g. acid binder).

Reference to other sections

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Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Temperature class: T1 (Autoignition temperature > 450 °C).

Conditions for safe storage, including any incompatibilities

Segregate from alkalis and alkalizing substances.

Suitable materials for containers: High density polyethylene (HDPE)

Further information on storage conditions: Keep container tightly closed and in a well-ventilated place. Protect against heat.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

64-18-6: formic acid

TWA value 9 mg/m³ ; 5 ppm (OEL (EU))

indicative

141-53-7: sodium formate

Exposure controls

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Wear chemical resistant protective gloves.

butyl rubber (butyl) - 0.7 mm coating thickness

chloroprene rubber (Neoprene)

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Avoid contact with the skin, eyes and clothing. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form:	liquid	
Colour:	clear	
Odour:	product specific	
Odour threshold:		
	not determined	
pH value:	2.5	
	(water, 10 %(m))	
Melting point:	-25 °C	
boiling temperature:	117.6 °C	(Directive 92/69/EEC, A.2)
	(1,013.3 hPa)	
Flash point:	> 110 °C	(DIN ISO 2592)
Evaporation rate:		
	not determined	
Flammability:	not self-igniting	
Lower explosion limit:		
	No data available., not determined	
Upper explosion limit:		
	No data available., not determined	
Ignition temperature:	520 °C	
Vapour pressure:	12.3 hPa	(measured)
	(20 °C)	
	dynamic	
Density:	1.3009 g/cm ³	(ISO 2811-3)
	(20 °C)	
Relative density:	approx. 1.3	
	(20 °C)	
Relative vapour density (air):		
	not determined	
Solubility in water:	soluble	
Partitioning coefficient n-octanol/water (log Kow):		
	not applicable	
Self ignition:	not determined	
Thermal decomposition:	not determined	
Viscosity, dynamic:	9.29 mPa.s	(DIN 51550)
	(20 °C)	

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Explosion hazard: Based on the chemical structure there is no indicating of explosive properties.

Fire promoting properties: Based on its structural properties the product is not classified as oxidizing.

Other information

Miscibility with water: miscible in all proportions

10. Stability and Reactivity

Reactivity

Corrosion to metals: Corrosive effect on metals.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Reacts with bases. Risk of exothermic reaction.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Incompatible materials

Substances to avoid:
bases

Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Information on: formic acid

Experimental/calculated data:

LD50 rat (oral): 730 mg/kg (OECD Guideline 401)

Information on: sodium formate

Experimental/calculated data:

LD50 mouse (oral): > 11,200 mg/kg (OECD Guideline 401)

An aqueous solution was tested.

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Information on: formic acid
Experimental/calculated data:
LC50 rat (by inhalation): 7.4 mg/l 4 h (BASF-Test)

rat (by inhalation): 3 min (IRT)
Mortality within the stated exposition time as shown in animal studies.

Irritation

Assessment of irritating effects:
Irritating to skin. Risk of serious damage to eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation cattle: irreversible damage (BCOP)

Respiratory/Skin sensitization

Information on: formic acid
Experimental/calculated data:
Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Information on: formic acid
Assessment of mutagenicity:
No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity:
No data available concerning carcinogenic effects.

Reproductive toxicity

Information on: sodium formate
Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Information on: sodium formate
Assessment of teratogenicity:
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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Information on: formic acid

Assessment of repeated dose toxicity:

| *After repeated administration the prominent effect is the induction of corrosion.*

Information on: sodium formate

Assessment of repeated dose toxicity:

| *Causes irritating effects at esophagus and the gastro-intestinal tract. Observed effects were reversible. The product has not been tested. The statement has been derived from products of a similar structure or composition.*

Aspiration hazard

No data available.

12. Ecological Information

Toxicity

Information on: formic acid

Toxicity to fish:

LC50 (96 h) 130 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 92/69/EEC, C.1, static)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Information on: sodium formate

Toxicity to fish:

LC50 (96 h) > 1,000 mg/l, Oncorhynchus mykiss (Flow through.)

The details of the toxic effect relate to the nominal concentration. No effects at the highest test concentration.

Information on: formic acid

Aquatic invertebrates:

EC50 (48 h) 365 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has not been tested. The statement has been derived from products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

Information on: sodium formate

Aquatic invertebrates:

EC50 (48 h) > 1,000 mg/l, Daphnia magna (Flow through.)

The details of the toxic effect relate to the nominal concentration.

Information on: formic acid

Aquatic plants:

EC50 (72 h) 1,240 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Information on: sodium formate

Aquatic plants:

EC50 (96 h) 790 mg/l (growth rate), Selenastrum capricornutum (static)

The details of the toxic effect relate to the nominal concentration.

Information on: sodium formate
Microorganisms/Effect on activated sludge:
No observed effect concentration (28 d) 22.13 mg/l, aerobic microorganisms (Oxygen consumption test, aerobic)

Persistence and degradability

Assessment biodegradation and elimination (H₂O):
Product is expected to be readily biodegradable.

Bioaccumulative potential

Information on: formic acid
Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

Information on: sodium formate
Assessment bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.
Study scientifically not justified.

Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:
The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

Results of PBT and vPvB assessment

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

13. Disposal Considerations

Waste treatment methods

Observe national and local legal requirements.

14. Transport Information

Land transport

ADR

Not classified as a dangerous good under transport regulations

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RID

Not classified as a dangerous good under transport regulations

Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

C	Corrosive.
35	Causes severe burns.
10	Flammable.
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Flam. Liq.	Flammable liquid
H314	Causes severe skin burns and eye damage.
H226	Flammable liquid and vapour.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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